



30TH EDITION

International Conference and Exhibition

SIA POWERTRAIN **ROUEN 2018**

The New Compression Ignition Engine For Passenger Cars & Commercial Vehicles



ROUEN (NORMANDY), FRANCE 16 & 17 May, 2018

TOPICS TO ADDRESSED:

- Worldwide market requirements and powertrain development trends
- New engines for passenger cars, commercial vehicles, off-road and industrial applications
- Fuel injection technology and combustion processes
- Air and EGR management systems
- Thermal management
- Waste heat recovery
- Exhaust aftertreatment concepts
- Powertrain efficiency improvements
- Advanced thermodynamic cycles,
- Alternative powertrain energy types: Sustainable liquid and gaseous fuels, fuel cell...
- Ways toward transportation decarbonisation (well-to-wheel)
- Driveline and transmission matching
- Powertrain management systems
- Hybrid powertrain systems and ancillary electrification
- Range extenders for electric applications
- Intelligent powertrain: Automated driving, connected vehicles...
- Modeling and simulation
- Engine, vehicle tests and calibration techniques



DEADLINE FOR SUBMISSION: 2 OCTOBER, 2017

CONTACT Molly BOISSIER • molly.boissier@sia.fr # +33 1 41 44 93 74























Dear Colleagues,

The automotive sector is experiencing an unprecedented transition towards new forms of mobility that include a massive integration of digital culture, hybridization, electrification and the creation of new mobility services. The scientific community is driving intense research into electricity storage capability, hydrogen fuel cells..., whilst maintaining their focus on internal combustion engines, hybridization and sustainable fuels for passenger cars, commercial vehicles, off-road and industrial applications.

In this context, the internal combustion engine still has a great potential. In particular, Diesel technology remains an attractive powertrain option, both for

Total Cost of Ownership and for meeting the challenging fleet CO_2 emissions targets. Furthermore, its high fuel economy enables a long range between refueling stops, thus representing the best available solution for high annual mileage and heavy goods transportation vehicles. As a result of continuous improvements in efficiency and emissions, Diesel technology will still have a key role to play in future sustainable mobility. Progress is foreseen in many areas such as ancillary electrification, combustion efficiency, thermal management, waste heat recovery, mechanical friction, exhaust after-treatment, hybridization and transmissions.

In addition, the integration of the different powertrain sub-systems and the shift to real driving test conditions is increasing system complexity. This requires a global system approach and recourse to more virtual development processes in order to provide affordable and efficient powertrain solutions.

The 30th SIA Powertrain Conference on New Compression Ignition Engines for Passenger Cars and Commercial Vehicles to be held in Rouen, France May 16-17, 2018, intends to address many of these established and new topics. Reflecting the ongoing focus shift in transportation decarbonisation to a well-to-wheel basis, new topics will be introduced on alternative powertrain energy types (sustainable liquid and gaseous fuels) and fuel cells. The conference will support the automotive community in providing an overall picture of state-of-the-art technologies and by anticipating future development challenges. This congress is recognized by the automotive stakeholders as an exceptional and unique technical event showing continuous growth in the number of participants and exhibitors. The 29th edition of the conference in Versailles in June 2017 was again a great success with more than 590 participants, 58 technical presentations and 24 exhibitors.

The Organizing Committee cordially invites you to take advantage of this internationally renowned event and to submit abstracts on any of the related conference topics by 2^{nd} October 2017.

We look forward to seeing you in Rouen next year either as a conference speaker, exhibitor or attendee.

Conference Chair

Dr Noureddine GUERRASSI,

 ${\it Chief Engineer, Advanced Injection~\&~ Combustion~ Engineering, DELPHI}$

ORGANISING AND SCIENTIFIC COMMITTEES

CONFERENCE CHAIR

NOUREDDINE GUERRASSI - DELPHI

ORGANISING COMMITTEE

NADIM ANDRAOS - FEV
PHILIPPE BERNET - RENAULT
JEAN-MARC BOULARD - IAV
PIERRE DURET - IFP SCHOOL
PIERRE-YVES GEELS - AVL
OMAR HADDED - DRIVE SYSTEM DESIGN
EMMANUEL JEAN - FAURECIA
MARC LEJEUNE - RENAULT TRUCKS
GEOFFROY MARTIN - MOV'EO
STÉPHANE MARTINOT - VALEO
JEAN-JACQUES MILESI - DYNERGIA
GAËTAN MONNIER - IFP ENERGIES
NOUVELLES
HANS NUGLISCH - CONTINENTAL

SEBASTIEN POTTEAU - EMC-MTT

ERWANN SAMSON - GROUPE PSA

RÉMY SCHMITT - BOSCH

CHAIRMEN

MANOLIS GAVAISES - CITY UNIVERSITY LONDON
FEDERICO MILLO - POLITECNICO DI TORINO
AMIN VELJI - KARLSRUHE INSTITUTE OF TECHNOLOGY

SCIENTIFIC COMMITTEE

ANDY WARD - RICARDO MICHAEL WEISSBÄCK - AVL

JESUS BENAJES - CMT UNIVERSITAT POLITECNICA DE VALENCIA **PHILIPPE CHINA** - TOTAL **BERTRAND DEMORTIER** - CONTINENTAL **GAETANO DE PAOLA** - IFP ENERGIES NOUVELLES FABRICE FOUCHER - UNIVERSITE D'ORLEANS **JEAN FLORENT GENIES** - GROUPE PSA JÖRG GINDELE - MAGNA FRANÇOIS JAUSSI - LIEBHERR **THOMAS KOCH** - KARLSRUHE INSTITUTE OF TECHNOLOGY THOMAS KÖRFER - FEV JAN MACEK - CZECH TECHNICAL UNIVERSITY **JUERGEN MANNS** - IAV **NICOLAS MARIE** - JOHN DEERE **KYOUNGDOUG MIN - SEOUL NATIONAL UNIVERSITY ALI MOHAMMADI** - TOYOTA **VIRGINIE MOREL** - ARAMCO **JÉRÔME MORTAL** - JAGUAR LAND ROVER **LUC MULLER** - SCHAEFFLER **THOMAS PAUER** - BOSCH **PHILIPPE PELLETIER** - RENAULT JEAN-CHARLES RICAUD - ARTS ET MÉTIERS PARISTECH **DANIEL ROETTGER** - FORD **JEAN-SÉBASTIEN ROUX** - HONEYWELL **MARTIN SACKMANN** - BORGWARNER BIANCA MARIA VAGLIECO - ISTITUTO MOTORI - CNR

IMPORTANT INFORMATION & DEADLINES

Speakers will be allocated 25 minutes each (20 minutes for presentation and 5 minutes for questions). All necessary instructions for the preparation of the paper will be sent to the authors after selection. The lead author (one per paper) will benefit a free access to the conference and meals.

Conference language:

- Proposals for papers must reach us by 2 October 2017.
- The successful papers will be selected by the organising committee and authors will be notified accordingly by **December 2017**.
- Before **13 April 2018**, successful authors must submit their manuscript for inclusion in the conference proceedings.

SIA POWERTRAIN // ROUEN 2018

The New Compression Ignition Engine For Passenger Cars & Commercial Vehicles

> 16 & 17 May, 2018 - Rouen, Normandy - France

CALL FOR PAPERS SUBMISSION DEADLINE 2 OCTOBER 2017

The authors

About the main speaker:			
Title :	Forename :	Surname :	
5			
Company			
Full address :			
Phono:			
Coll:			
About the co-authors#1 :			
Title :	Forename :	Surname :	
Position :			
Company :			
Full address :			
Phone :			
Cell:			
F-mail :			
About the co-authors#2 :			
Title :	Forename :	Surname :	
Position :			
Company :			
Full address :			
Phone :			
About the co-authors#3 :			
Title :	Forename :	Surname :	
Phone :			
Cell :			
E mail ·			
About the co-authors#4:			
Title :	Forename :	Surname :	
D = =!#! = :: .			
Company			
Full address :			
Phone :			
Cell :			
F-mail :			

Do-:+:	Forename :	
Company		
Full address :		
Cell :		
E-mail :		
bout the co-authors#6 :		
	Forename :	Surname :
Company		
Full address :		
Cell :		
E-mail :		
·	nly the main speaker is FREE of CHAR	GE. Co-authors benefit from a special rate of 495,00€ VAT excluded *
* French VAT = 20%		
he abstract		
ne abstract		
 Topics classifi 	ication	
O Worldwide ma	arket requirements and powertrai	n development trends
		n development trends hicles, off-road and industrial applications
O New engines for		hicles, off-road and industrial applications
O New engines for O Fuel injection to	or passenger cars, commercial ve	hicles, off-road and industrial applications
O New engines for O Fuel injection 1	or passenger cars, commercial ve technology and combustion proce anagement systems	hicles, off-road and industrial applications
O New engines for O Fuel injection to O Air and EGR m	or passenger cars, commercial ve technology and combustion proce anagement systems gement	hicles, off-road and industrial applications
O New engines for Fuel injection to Air and EGR mo Thermal mana O Waste heat reco	or passenger cars, commercial ve technology and combustion proce anagement systems gement	hicles, off-road and industrial applications
O New engines for Fuel injection to Air and EGR mo Thermal mana O Waste heat reconstruction of Exhaust aftertone of the Police of the Police of Thermal mana of the Police of Thermal management of the Police of Thermal management of the Police of Thermal management of Thermal manage	or passenger cars, commercial ve technology and combustion proce anagement systems gement covery	hicles, off-road and industrial applications
O New engines for Fuel injection of O Air and EGR mo Thermal mana O Waste heat reconstruction of Exhaust aftertool Powertrain efforts.	or passenger cars, commercial ve technology and combustion proce anagement systems gement covery reatment concepts	hicles, off-road and industrial applications
O New engines for O Fuel injection of O Air and EGR mo Thermal mana O Waste heat reconstruction of Control of	or passenger cars, commercial ve technology and combustion proce anagement systems gement covery reatment concepts ficiency improvements modynamic cycles,	hicles, off-road and industrial applications
O New engines for O Fuel injection to O Air and EGR mo Thermal mana O Waste heat reconstruction of Powertrain effor O Advanced there O Alternative positions.	or passenger cars, commercial ve technology and combustion proce anagement systems gement covery reatment concepts ficiency improvements modynamic cycles,	hicles, off-road and industrial applications esses nable liquid and gaseous fuels, fuel cell
O New engines for O Fuel injection of O Air and EGR mo Thermal mana O Waste heat reconstruction of Exhaust afterto O Powertrain effor O Advanced there O Alternative poor O Ways toward	or passenger cars, commercial vertechnology and combustion process anagement systems gement covery reatment concepts iciency improvements modynamic cycles, owertrain energy types: Sustain	hicles, off-road and industrial applications esses nable liquid and gaseous fuels, fuel cell
O New engines for O Fuel injection of O Air and EGR mo Thermal mana O Waste heat reconstruction of Downward O Advanced there O Alternative po O Ways toward O Driveline and	or passenger cars, commercial vertechnology and combustion process anagement systems gement covery reatment concepts iciency improvements rmodynamic cycles, owertrain energy types: Sustail transportation decarbonisation	hicles, off-road and industrial applications esses nable liquid and gaseous fuels, fuel cell
O New engines for O Fuel injection of O Air and EGR mo Thermal mana O Waste heat reconstruction of Exhaust afterto O Powertrain effor O Advanced there O Alternative po O Ways toward O Driveline and O Powertrain mo	or passenger cars, commercial vertechnology and combustion process anagement systems gement covery reatment concepts iciency improvements rmodynamic cycles, owertrain energy types: Sustain transportation decarbonisation	hicles, off-road and industrial applications esses nable liquid and gaseous fuels, fuel cell on (well-to-wheel)
O New engines for O Fuel injection of O Air and EGR modern of the O Thermal mana O Waste heat reconstruction of Exhaust afterto O Powertrain effor O Advanced there O Alternative polyoperation of O Driveline and O Powertrain modern of O Hybrid power	or passenger cars, commercial vertechnology and combustion process anagement systems gement covery reatment concepts ficiency improvements rmodynamic cycles, owertrain energy types: Sustain transportation decarbonisation transmission matching management systems	hicles, off-road and industrial applications esses nable liquid and gaseous fuels, fuel cell on (well-to-wheel)
O New engines for O Fuel injection of O Air and EGR modern of the O Thermal mana O Waste heat reconstruction of Exhaust afterto O Powertrain effor O Advanced there O Alternative por O Ways toward O Driveline and O Powertrain modern of O Powertrain modern of O Range extending	or passenger cars, commercial vertechnology and combustion process anagement systems gement covery reatment concepts ficiency improvements rmodynamic cycles, owertrain energy types: Sustain transportation decarbonisation transmission matching management systems rtrain systems and ancillary electrons	hicles, off-road and industrial applications esses nable liquid and gaseous fuels, fuel cell on (well-to-wheel) ectrification
O New engines for O Fuel injection of O Air and EGR modern of the O Thermal mana O Waste heat reconstruction of Exhaust afterto O Powertrain effor O Advanced there O Alternative por O Ways toward O Driveline and O Powertrain modern of O Powertrain modern of O Range extended to Compare the O Range extended the O Range extended to Compare the O Range extended the O Range exte	or passenger cars, commercial vertechnology and combustion process anagement systems gement covery reatment concepts ficiency improvements modynamic cycles, owertrain energy types: Sustain transportation decarbonisation transmission matching management systems rtrain systems and ancillary electors overtrain: automated driving, overtrain: automated driving, or	hicles, off-road and industrial applications esses nable liquid and gaseous fuels, fuel cell on (well-to-wheel) ectrification

•	Résumé
	Title of paper:
	Abstract (max. 1500 characters):
	Relevance and innovation of your presentation:
	Comments: